IMPORTANT NOTICE - - PLEASE
READ THIS BEFORE FLYING FS2

FLIGHT SIMULATOR II FOR COMMODORE 64 .
VERSION 1.01 RELEASE NOTES (3-7-84)

Disk - ALWAYS KEEP THE PROGRAM DISK IN THE DRIVE WHEN RUNNING FLIGHT SIMULATOR. Pieces of the program and areas of the database are read from disk (overlayed) as you select features (the editor for example) and fly between areas. The 1541 disk drive is rather slow, and the effect is quite noticable. The screen border changes color during disk activity. The following times apply:

Initial program load	- 2 min 40 sec
1st use of editor	- 25 sec
1st exit from editor	- 35 sec
editor use/exit if no flight area change	- 1/4 sec*
Major geographic area change	- 30 sec
Minor area load (near a major airport)	- 10 sec
Reset after 1st crash	- 1 min 05 sec
Reset after subsequent crash or editor use	- 1/4 sec*

*due to memory buffering after 1st use. This value reverts to 30 seconds if the course plotting system is turned on.

Mode Disk Load/Save - The ctrl Z and ctrl X keys only work while you are in edit mode.

Unimplemented Features - A few features mentioned in the manual don't exist. These include: wind turbulence effects, glideslope flag, enemy color on the tactical radar screen, and the bank indicator around the edge of the artificial horizon.

RETURN Key - This key can be used instead of ctrl M for magneto control in reality mode. We find this key to be a big convenience when setting the magnetos.

Pause - Ctrl P, P, or RUN/STOP can be used to pause the simulator.

NAV2 - When ADF is enabled, you must reboot to get VOR2 and NAV2 back.

Joysticks - The joystick control system has some new features:

1. The aileron/elevator stick (control port 1, left stick) functions as a view selector. Press the joystick button followed by stick movement to the left, right, front or back. Only these 4 view directions are available under stick control.

2. The "JOYSTICK" parameter on the edit page is gone. Joystick selection is automatic with the first use of the joystick. You can freely mix joystick and keyboard commands and can switch between keyboard and stick control. Don't overlap keypresses and joystick movements.

3. The throttle stick's push button is a machine gun control.

Over-control Limiter - The lag between control movements and screen graphics generation causes pilots to over-control the simulator (not stop turning until the turn has gone too far for example). The over-control limiter reduces this problem by essentially 'backing up' one display frame when you center the controls. You can see the effect by getting into a rapid left turn and centering the controls. The screen seems to freeze for a second because the same display frame is displayed twice.

The limiter is helpful on rapid turns but annoying on low bank rate turns. The value on the fix page sets the turn rate at which the limiter "cuts in". Ten degrees per second is a good value. A zero value enables the system on all turns (which is quite annoying). The value is preset to 10.

War Game Exit - Once you are in the war game, you can not go back to regular flight modes without rebooting (due to the loss of panel instruments and changes made in the graphics system). If you try to go into a regular flight mode from the war game mode, the system will automatically reboot.

Better Stall Breaks - Two new simulation factors (laminar airflow and wing surface turbulence) have been added to the simulator. Stall breaks are "cleaner" and more pronounced.

APPENDIX 4
INTERESTING TOPOGRAPHICAL FEATURES

AREA	FEATURE
Chicago	Sears Tower, John Hancock Building, I57 highway to Champaign
Kankakee	Kankakee river
Seattle	Space needle, Lake Washington, Lake Sammamish, Mercer Island, Mercer Island and Evergreen Point Floating Bridges, I405, I5 down to Tacoma, Mt. Rainier
Los Angeles	Highway system including San Diego, Santa Monica, Harbor, and Ventura Freeways, Marina del Rey, Santa Monica and Santa Ana Mountains.
New York	Manhattan Island, World Trade Center (twin towers with hidden surface elimination), Empire State Building, Statue of Liberty Manhattan Bridge
Champaign	North of Champaign during non-summer seasons, a "Snow Grid" ground texturing system is activated.
War Game	Two solid shaded mountain ranges with hidden surface elimination, Snow capped mountain peak, 3D hangar at main airbase that you can taxi into.